MOTION FILED
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Nos. 82-524, 82-545 and 82-551

IN THE

Supreme Court of the United States

OCTOBER TERM, 1982

BALTIMORE GAS AND ELECTRIC CO., *et al.*,
Petitioners,

v.

NATURAL RESOURCES DEFENSE COUNCIL, INC.,
Respondent.

UNITED STATES NUCLEAR REGULATORY COMMISSION AND UNITED STATES OF AMERICA,
Petitioners,

v.

NATURAL RESOURCES DEFENSE COUNCIL, INC., *et al.*,
Respondents.

COMMONWEALTH EDISON COMPANY, *et al.*,
Petitioners,

v.

NATURAL RESOURCES DEFENSE COUNCIL, INC., *et al.*,
Respondents.

On Petitions for a Writ of Certiorari to the United States Court of Appeals For the District of Columbia Circuit

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MOTION FOR LEAVE TO FILE A BRIEF AND BRIEF *AMICUS CURIAE* OF SCIENTISTS AND ENGINEERS FOR SECURE ENERGY, INC. IN SUPPORT OF PETITIONS FOR A WRIT OF CERTIORARI

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MOTION FOR LEAVE TO FILE BRIEF *AMICUS CURIAE*

In accordance with this Court's Rule 36.1, Scientists and Engineers for Secure Energy, Inc. ("SE_2"), moves the Court for leave to file the attached brief *amicus curiae* in the above cases. Concurrent with the filing of this motion, SE_2's counsel has sent the Clerk of this Court copies of letters of consent from all parties with two exceptions. The State of New York has refused

consent. The State of Wisconsin has not responded to our request for consent.

SE_2 supports the petitions for a writ of certiorari to the United States Court of Appeals for the District of Columbia Circuit. SE_2 is a non-profit corporation organized in 1976 under the laws of the State of New York. Its members include over 1,000 faculty members and researchers from American colleges and universities, both state and private. SE_2's members include eight Nobel Laureates and comprise an interdisciplinary community of significant scientific accomplishment.

Representing the membership of SE_2 in this matter are Hans Albrecht Bethe, Frederick Seitz, Eugene P. Wigner and Edward Teller. Hans Bethe, currently a professor at Cornell University, was director of the Theoretical Physics Division of Los Alamos Science Laboratory from 1943 to 1946; the head of the Presidential Study of Disarmament, 1958; the recipient of a Nobel Prize in Physics in 1967; and is a leading contributor to the theory of nuclear reactors. Frederick Seitz, Chairman of SE_2, is a recipient of the National Medal of Science, our nation's highest science award. Dr. Seitz has served as president of the National Academy of Sciences and Chairman of the Board of Trustees of Sloan-Kettering Institute for Cancer Research. He currently is Chairman of the Guggenheim Foundation. Eugene P. Wigner received a Nobel Prize for Physics in 1963, the National Medal of Science, the Albert Einstein Award, and has served as President of the American Physical Society. Dr. Wigner has been affiliated for most of his professional career with Princeton University. Edward Teller presently is affiliated with the Hoover Institution, Stanford University.

Dr. Teller has made important contributions in several fields including chemical physics, molecular physics, nuclear physics and quantum theory. He has authored many books and received numerous awards during his distinguished career.

SE_2 and its members are dedicated to the prudent advancement of technology for the benefit of mankind. Its purpose is to correct the alarming degree of misunderstanding on fundamental scientific and technological issues permeating the national energy debate, especially with respect to the balancing of environmental concerns. Toward that end, SE_2 offers its views, based on the knowledge and expertise of its members, to the public and to the various governmental agencies with responsibility for the development of a proper legal framework for the resolution of energy issues. SE_2 has appeared as *amicus curiae* before this Court on several occasions in energy related cases including *Vermont Yankee II*. Through its Working Group on Waste Disposal, SE_2 is also a participant in the NRC's ongoing Rulemaking on the Storage and Disposal of Nuclear Waste.

As citizens, members of SE_2 are deeply concerned for the well-being and future hopes of our society. SE_2 and its members have an interest in assuring that consideration of major federal actions be conducted under NEPA in accord with scientific principles and the orderly rule of law. As scientists and engineers they are quite aware of the many problems related to the production of needed electric power and the importance of a safe and secure energy base for the continued security and prosperity of the country. In their professional roles, they are keenly sensitive to the limits of scientific knowledge and meaningful debate. They view

the decision below as reaching beyond those limits and perverting scientific principles by sometimes engaging in irrational hyperbole in disregard of the proper role of the judiciary and the previous explicit directions by this Court.

For the foregoing reasons, SE, respectfully urges the Court to grant its motion for leave to file the attached brief as *amicus curiae*.

Respectfully submitted,

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BRIEF OF *AMICUS CURIAE*

This brief is submitted by Scientists and Engineers for Secure Energy, Inc. ("SE_2") in support of the petition for certiorari filed by Baltimore Gas and Electric Co., *et al.*, No. 82-524, by United States Nuclear Regulatory Commission and United States of America, No. 82-545, and by Commonwealth Edison Company, *et al.*, No. 82-551, seeking review of the District of Co-

lumbia Circuit's decision in *Natural Resources Defense Council, Inc. v. Nuclear Regulatory Commission*, and consolidated cases, 685 F.2d 459 (D.C. Cir. 1982) (Pet. App. 1a - 181a).

INTEREST OF SE_2

The interest of SE_2 and its reasons for participating in this case are set forth in the attached motion for leave to file this brief. That statement of interest is incorporated herein.

SUMMARY OF ARGUMENT

Congress, the NRC and scientists expect the development of adequate waste disposal technology (development which has occurred and is being implemented in countries like Sweden). The court of appeals, while citing no scientific reason not to expect this development in the United States, has interfered with the NRC's policy judgment. Even if one were to assume that Congress, the NRC and scientists may be wrong and that no such technology will be developed, the most adverse environmental consequences would involve such insignificant risks as a repository leak every 2,500 years, risks less than that of dying on a given day from a volcanic eruption. *Id.* at 177a-80a (Wilkey, J., dissenting).

By mandating quantification of these consequences in the NRC's table and thus requiring discussion in individual licensing proceedings, the majority of the D.C. panel would trivialize the NRC's rulemaking and depart from the consistent approach of numerous other courts. The court would require the NRC and licensing

agencies to spend time considering virtually all consequences, however insignificant. To satisfy the court, the NRC's proceedings would essentially never end. Thus, the court of appeals has seized unlimited authority to control the NRC, contrary to this Court's holding in *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.*, 435 U.S. 519, 555 (1978) [hereinafter cited as *Vermont Yankee II*].

ARGUMENT

The majority below held that the NRC, in preparing a table which would serve merely as a starting point for the development of individual environmental impact statements, could neither (1) consider environmental consequences alone and then exclude them from cost-benefit balancing, nor (2) treat environmental costs represented by uncertainties as zero unless their cost is, in fact, zero. This would require the table, which would not foreclose discussion of other aspects of the fuel cycle not addressed by the table, to expressly quantify unlikely consequences and unascertainable risks which other courts have allowed subsequent environmental impact statements to exclude or only estimate.

In *Vermont Yankee II*, 435 U.S. at 553, this Court applied a "threshold test" to NEPA's requirement that environmental impact statements consider alternatives to the proposed action. Under this test, the statements need consider only significant alternatives.

Numerous lower courts similarly have construed NEPA's requirement that environmental impact statements consider adverse environmental effects. These

courts have allowed statements to exclude unlikely consequences and to estimate unascertainable risks, regardless of the closeness of the cost-benefit balance. This, of course, conforms to the behavior of reasonable individuals in ordinary situations, as Judge Wilkey recognized in his dissent, Pet. App. 179a, and complies with the language of NEPA which requires that the statement discuss adverse environmental effects which *cannot* be avoided. This Court should issue its writ of certiorari to resolve the conflict between the majority below and other circuit courts.

In *Carolina Environmental Study Group v. United States*, 510 F.2d 796, 799 (D.C. Cir. 1975), the D.C. Circuit itself held that the environmental impact statement for a nuclear reactor may exclude the improbable simultaneous malfunctioning of all safety systems, despite the significant environmental impact of such an event. The majority below now cites *Carolina Environmental Study Group* to the effect that environmental impact statements must consider probabilities as well as consequences. Pet. App. 36a n.100. *Carolina Environmental Study Group* does not hold that statements must consider all risks of environmental damage, but recognizes that "[t]here is a point at which the probability of an occurrence may be so low as to render it almost totally unworthy of consideration." Pet. App. 168a n.149 (Wilkey, J., dissenting).

Four other circuits similarly have recognized that environmental impact statements need not discuss unlikely consequences. In *Warm Springs Dam Task Force v. Gribble*, 621 F.2d 1017, 1026 (9th Cir. 1980), the Ninth Circuit held that where the failure of a dam in a catastrophic seismic event was "remote and highly

speculative," and where the impact of such an occurrence was obvious, the environmental impact statement may exclude discussion. In *Environmental Defense Fund v. Hoffman*, 566 F.2d 1060, 1067 (8th Cir. 1977), the Eighth Circuit held that an environmental impact statement need include only a "reasonably thorough discussion of the significant aspects of the probable environmental consequences," and not the "remote and highly speculative" effect of a public works project on groundwater levels. Similar language appears in *Adler v. Lewis*, 675 F.2d 1085, 1098 (9th Cir. 1982), which involved proposed highway construction. In *Swain v. Brinegar*, 542 F.2d 364, 368 (7th Cir. 1976), the Seventh Circuit held that an environmental impact statement for a proposed highway need consider only "reasonably foreseeable" consequences. In *Environmental Defense Fund v. Corps of Engineers*, 492 F.2d 1123, 1137 (5th Cir. 1974), the Fifth Circuit held that an environmental impact statement for a navigation project need discuss only "probable" and "significant" effects. *See also Trout Unlimited v. Morton*, 509 F.2d 1276, 1283 (9th Cir. 1974).

Other courts have held that environmental impact statements may estimate unascertainable risks. In *Sierra Club v. Morton*, 510 F.2d 813, 822 (5th Cir. 1975), the Fifth Circuit allowed prediction of the environmental impact of oil spills from matrix approximations where the analysis was necessarily speculative and somewhat arbitrary. *See also Environmental Defense Fund v. Andrus*, 619 F.2d 1368, 1374 (10th Cir. 1980); and *Natural Resources Defense Council, Inc. v. Morton*, 458 F.2d 827, 837 (D.C. Cir. 1972) (environmental impact statements may exclude "detailed discussion" of unascertainable effects). The Ninth Circuit has stated: "If we were to impose a requirement that an

impact statement can never be prepared until all relevant environmental effects were known, it is doubtful that any project could ever be initiated." *Jicarilla Apache Tribe v. Morton*, 471 F.2d 1275, 1280 (9th Cir. 1973).

Stricter standards should not apply to NRC rulemaking than to the environmental impact statement itself. In the present cases, the NRC acted properly in excluding unlikely consequences from the table and by estimating for limited purposes the insignificant or unascertainable risk to be zero. The NRC based its conclusion on reasonable analysis. Courts may not substitute their judgments for those of the NRC. *Vermont Yankee II*, 435 U.S. at 555.

Excluding the storage technology issue from NRC's table by no means excludes it from public consideration, in environmental impact statements or elsewhere. NRC has considered the matter on other occasions, as have the Energy Research and Development Administration, a Presidential task force, Congress and states and localities. Pet. App. 138a n.60 (Wilkey, J., dissenting). Congress has clearly intended that uncertainty regarding the technology should not delay nuclear reactor licensing. *Illinois v. Nuclear Regulatory Commission*, 591 F.2d 12, 16 (7th Cir. 1979); *Natural Resources Defense Council, Inc. v. Nuclear Regulatory Commission*, 582 F.2d 166, 171 (2d Cir. 1978). *Cf. Environmental Defense Fund v. Corps of Engineers*, 492 F.2d at 1137 (Congressional consideration eliminates need for NEPA analysis). However, in the instant cases as well as in *Minnesota v. Nuclear Regulatory Commission*, 602 F.2d 412, 418 (D.C. Cir. 1979), the D.C. Circuit has not accorded that deference to Congressional policy. Thus there is a developing conflict,

which this Court should address, between the D.C. Circuit and other circuits on this issue.

As the majority below notes, all environmental costs involve uncertainty. Pet. App. 36a n.100. Parties challenging the application of NEPA, therefore, must demonstrate the inadequacy of the agency's application by a preponderance of the evidence, rather than by a prima facie showing of deficiencies. *Isle of Hope Historical Association v. Corps of Engineers*, 646 F.2d 215, 220 (5th Cir. 1981); *Sierra Club v. Froehlke*, 534 F.2d 1289, 1300 (8th Cir. 1976). *See also Vermont Yankee II*, 435 U.S. at 553. Otherwise, parties could challenge the agency action continually and the NRC's proceedings would never end.

Agencies must consider all responsible scientific opinions, *Committee for Nuclear Responsibility, Inc. v. Seaborg*, 463 F.2d 783, 787 (D.C. Cir. 1971), but in the present case the court of appeals has cited no scientific reason not to expect development of adequate technology. The most pessimistic, conservative conclusion possible is that "the evidence, although 'tentative' and general in nature, 'favors the view that suitable sites can be found.'" Pet. App. 41a. Under these circumstances, allowing the court of appeals to reject the NRC's conclusions would give the court virtually unlimited authority to control the NRC.

CONCLUSION

The majority of a D.C. Circuit panel has again overstepped judicial boundaries by intruding on the province of Congress to establish policy and of the NRC to effectuate that policy in the nuclear energy field. Congress and the NRC continue in the assump-

tion—supported by dozens of hearings over the years and by reality in foreign countries—that a long-range solution to permanent waste disposal in the United States will be found. The issue has been recognized, studied, discussed, and disclosed by those responsible for policy decisions. The majority below impermissibly intrudes on the NRC's decision to treat as zero (for limited purposes) factors of "infinitely small" magnitude. Scientists often deal with infinitely small numbers approaching zero or infinitely large numbers approaching infinity. To make decisions based on such numbers obviously requires a realistic appraisal of the meaningfulness of the numbers, not slavish dedication. *Amicus curiae* believes the NRC dealt very realistically with infinitely small numbers by treating them for practical, limited purposes, as zero.

This Court has labeled "Kafkaesque" similar past efforts by the D.C. Circuit to intrude on the province of Congress and the NRC. *Amicus curiae* respectfully urges the Court to grant certiorari and to order the D.C. Circuit to rewrite this latest Kafka tome.

Respectfully submitted,

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